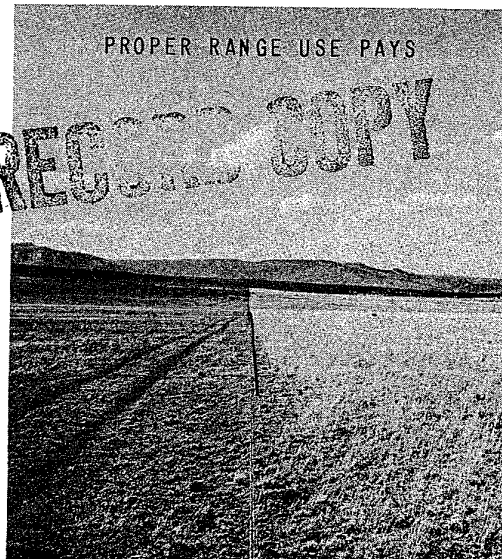
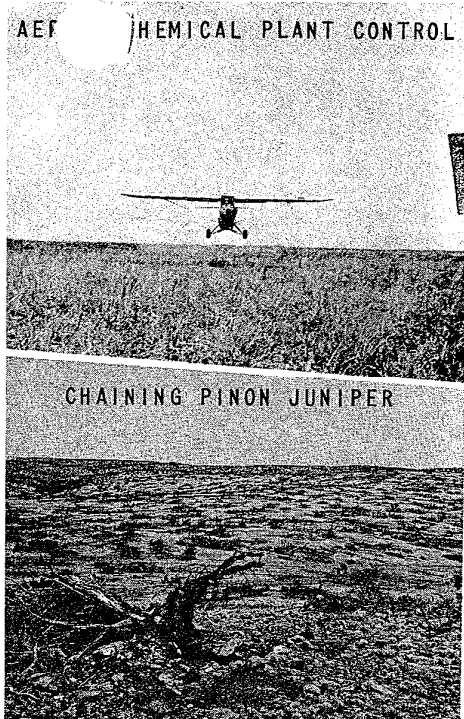
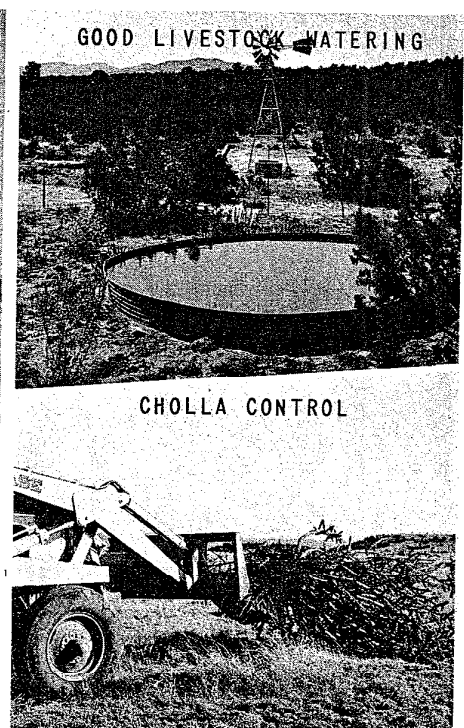


RANGE CONSERVATION - TECHNICAL NOTES



U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
NEW MEXICO

RANGE TECHNICAL NOTE NO. 24



June 16, 1967

Subject: Salting for Livestock Distribution

The following material may provide useful information in discussing the proper placement of salt to improve distribution of grazing. In some areas this will repeat some of the information contained in the salting specification.

WHY CORRECT SALTING

1. Livestock use forage that would otherwise be ungrazed.
2. It relieves concentration of livestock around watering places, in narrow valley bottoms, and near shade to some extent.
3. Healing of eroded areas at natural points of livestock concentration can be speeded.

To: AC's, WUC's
Waldo Frandsen, Portland
Niner, Lohmiller, Los Lunas
Dan Merkel, Santa Fe
E. L. Roget
J. G. Douglas (8)
Records & Reports

2.

4. Cattle prefer to go from salt to grazing and not from salt to water. Tests made where cattle could easily walk from salt to water in 20 minutes, showed an average of seven hours between taking salt and drinking.
5. Salting close to adequate forage improves gains because there is no less trailing.

HOW TO DISTRIBUTE SALT

1. To aid livestock distribution problems.

- a. Place salt a reasonable distance away from water or natural congregating areas.
- b. Place salt in areas being under utilized.
- c. Move salt as need arises to aid distribution of livestock over the range.
- d. Avoid sandy or other erodible spots.
- e. Pick places you can check when riding and livestock can reach from several directions.
- f. Move salt before the area serviced exceeds proper degree of use.
- g. Rough guides to amounts needed are:
 - (a) Sheep and goats - 3 to 4 pounds per year.
 - (b) Mature cattle - 20 to 25 pounds per year.
 - (c) Horses - 30 to 40 pounds per year.
- h. Wherever possible use portable feeders that can be moved to new locations as needed.

2. To provide elements for proper digestion.

- a. Place salt-bone-meal-mineral mixtures in areas of natural salting. Minimum salt requirements per animal month:

	<u>On Green Forage</u>	<u>On Dry Forage</u>
Cattle	2.75 lbs.	1.00 lbs.
Sheep	.75 lbs.	.25 lbs.
Horses	3.00 lbs.	2.00 lbs.

3. Number of salting locations.

- a. On long season pasture in rolling country--one salting place for each 40 to 60 cattle.
- b. On short season pasture in rough country--one salting place for each 20 head.
- c. Not over $\frac{1}{4}$ to 1 mile apart on rough range and not over 2 miles on gently rolling range.

- 3.
4. Start distribution of salt when the forage is green and succulent.
5. On unfenced ranges locate the first salting stations as far out from water as livestock can be induced to graze between salt and water.

Positive evidence is sometimes needed to convince SCD cooperators that cattle do not need water and salt at a one-stop station. The following direct quote from original research may help in working with cooperators on this practice:

BENTLY, J. R., Journal of Forestry, Vol. 39 (10): 832-836., October 1941; California Forest and Range Experiment Station.

A method of automatically recording the time interval between salting and watering of cattle was tested within a 537-acre experimental pasture where the salt ground was located a little more than half a mile, air-line distance, from the water trough.

The automatic records showed that salt was taken on the average only 2 days out of 3 during each of the 3 months of the study-- July, August and September. The distribution of the salting days was most irregular, for salt might be taken each day for a week and then missed for one or two days, or taken every other day for about a week. There was no apparent correlation between days of salting and variations in such factors as air temperature or succulence of the forage. The records on the charts indicated that all the cattle watered every day.

This experiment contributes information on the question of whether cattle must drink water soon after licking salt. The average interval between salting and watering was 7 hours and 24 minutes, while the cattle could easily walk from salt to water in 20 minutes. Sixty-five percent of the intervals were over 4 hours in length and less than 17 percent were under 1 hour. The indication was clear that the cattle did not go to water directly after salting.